

(FILE 'USPAT' ENTERED AT 15:11:58 ON 08 MAR 1999)

L1 17777 S MASS SPECTRO?
L2 2076 S L1 AND DNA
L3 5121 S VESICLE#
L4 191 S L2 AND L3
L5 (286036) S SUBSTRATE#
L6 127 S L4 AND SUBSTRATE#
L7 14 S L6 AND DISPENS?
L8 2185 S L1 AND (DNA OR NUCLEIC ACID)
L9 50851 S 422/CLAS
L10 52 S L8 AND L9

=> d 1-52

1. 5,874,214, Feb. 23, 1999, Remotely programmable matrices with memories; Michael P. Nova, et al., 435/6; 365/151, 153; 422/58, 68.1, 82.01, 82.05, 82.12; 424/422, 489; 435/7.8, 7.92 [IMAGE AVAILABLE]
2. 5,874,213, Feb. 23, 1999, Capillary electrophoretic detection of nucleic acids; Lendell L. Cummins, et al., 435/6; 422/50, 62, 68.1, 69, 82.05; 435/286.1, 287.1, 287.2, 289.1; 436/501; 530/350; 536/25.3, 25.4 [IMAGE AVAILABLE]
3. 5,872,015, Feb. 16, 1999, Molecular diversity screening method; Duane L. Venton, et al., 436/538; 210/321.63; 422/68.1; 435/7.1, 7.8, 287.2; 436/536, 824; 530/414 [IMAGE AVAILABLE]
4. 5,872,010, Feb. 16, 1999, Microscale fluid handling system; Barry L. Karger, et al., 436/173; 210/198.2; 422/10, 58, 59, 68.1, 69, 70; 436/52, 86, 87, 89, 91, 93, 94, 161, 172, 174, 175, 177, 183 [IMAGE AVAILABLE]
5. 5,871,697, Feb. 16, 1999, Method and apparatus for identifying, classifying, or quantifying DNA sequences in a sample without sequencing; Jonathan Marc Rothberg, et al., 422/68.1; 435/5, 6, 91.2; 536/23.1, 24.3, 24.33; 702/20 [IMAGE AVAILABLE]
6. 5,869,240, Feb. 9, 1999, Methods and apparatus for sequencing polymers with a statistical certainty using mass spectrometry; Dale H. Patterson, 435/6; 422/50, 62; 435/4, 18, 91.1, 91.2; 530/300, 350; 536/23.1, 24.3 [IMAGE AVAILABLE]
7. 5,856,082, Jan. 5, 1999, Devices and methods for characterizing proteins and peptides; Rudolf H. Aebersold, et al., 435/4; 204/452, 603; 250/288; 422/70; 435/7.1, 7.5, 15, 21, 68.1, 97, 287.9, 288.6 [IMAGE AVAILABLE]
8. 5,854,967, Dec. 29, 1998, Device and method for photoactivation; David P. Hearst, et al., 422/186.3 [IMAGE AVAILABLE]
9. 5,853,668, Dec. 29, 1998, Apparatus allowing sequential chemical reactions; Geoffrey Stephen Begg, et al., 422/82.02; 204/450, 451, 452; 422/82.01, 101, 186.04; 436/89, 180 [IMAGE AVAILABLE]
10. 5,849,542, Dec. 15, 1998, Primer extension mass spectroscopy nucleic acid sequencing method; Michael Alan Reeve, et al., 435/91.1; 250/281, 287; 422/82.01; 435/91.2; 536/23.1, 24.3; 702/27, 85 [IMAGE AVAILABLE]
11. 5,827,659, Oct. 27, 1998, Methods and apparatus for sequencing polymers using mass spectrometry; Dale H. Patterson, 435/6; 422/99; 435/4, 5, 91.1, 287.2, 288.7; 530/300, 333 [IMAGE AVAILABLE]
12. 5,824,559, Oct. 20, 1998, Method of analyzing 5-hydroxyindoles and catecholamines, and a device for performing the same; Hitoshi Nohta, et

al., 436/111; 422/52, 69, 70, 81, 82.05; 436/63, 89,
91, 96, 106, 131, 161, 164, 166, 172, 174 [IMAGE AVAILABLE]

13. 5,780,232, Jul. 14, 1998, DNA sequencing, mapping, and diagnostic processes using hybridization and stable isotope labels of DNA; Heinrich F. Arlinghaus, et al., 435/6; 422/68.1, 69, 78, 80, 82.05, 82.09; 435/810; 436/501; 536/25.3 [IMAGE AVAILABLE]

14. 5,756,304, May 26, 1998, Screening of microorganisms for bioremediation; Stevan B. Jovanovich, 435/34; 422/50, 68.1; 435/4, 252, 254.1, 262, 800, 821, 832, 839; 436/43, 139; 588/251, 900 [IMAGE AVAILABLE]

15. 5,741,462, Apr. 21, 1998, Remotely programmable matrices with memories; Michael P. Nova, et al., 422/68.1, 50, 57, 58, 82.05, 99, 102, 104; 435/5, 6, 7.1, 7.2, 7.9, 91.1; 436/161, 163, 501, 518, 523, 524, 528; 702/19, 22, 27, 30 [IMAGE AVAILABLE]

16. 5,716,825, Feb. 10, 1998, Integrated nucleic acid analysis system for MALDI-TOF MS; William S. Hancock, et al., 435/286.5; 250/288; 422/68.1; 435/287.2, 287.9, 288.4 [IMAGE AVAILABLE]

17. 5,683,661, Nov. 4, 1997, Device and method for photoactivation; David P. Hearst, et al., 422/186.3; 250/455.11, 504R [IMAGE AVAILABLE]

18. 5,674,743, Oct. 7, 1997, Methods and apparatus for DNA sequencing; Kevin M. Ulmer, 435/287.2; 422/82.08; 435/288.7; 436/94, 172 [IMAGE AVAILABLE]

19. 5,646,048, Jul. 8, 1997, Microcolumnar analytical apparatus with microcolumnar flow gating interface and method of using the apparatus; Catherine Keely Templin, et al., 436/180; 96/106; 204/601; 210/198.2; 285/911; 422/70, 103 [IMAGE AVAILABLE]

20. 5,637,458, Jun. 10, 1997, Apparatus and method for the detection and assay of organic molecules; Robert Frankel, et al., 435/6; 356/244, 318; 422/55, 57, 82.01, 82.05; 435/7.1; 436/149, 164, 527, 807 [IMAGE AVAILABLE]

21. 5,633,129, May 27, 1997, Electrophoretic detection and separation of mutant DNA using replaceable polymer matrices; Barry L. Karger, et al., 435/6; 204/456, 605; 422/68.1; 435/18, 173.1, 283.1, 285.1, 287.1, 287.2, 289.1, 810; 436/501; 536/22.1, 25.3, 25.4 [IMAGE AVAILABLE]

22. 5,622,824, Apr. 22, 1997, DNA sequencing by mass spectrometry via exonuclease degradation; Hubert K oster, 435/6; 250/282, 288; 422/68.1 [IMAGE AVAILABLE]

23. 5,612,184, Mar. 18, 1997, Device for detecting mercury in water; Reinhardt A. Rosson, 435/6; 422/52, 82.08 [IMAGE AVAILABLE]

24. 5,609,744, Mar. 11, 1997, Assembly suitable for identifying a code sequence of a biomolecule in a gel embodiment; Frederic Zenharuser, et al., 204/606, 616; 356/301, 318; 422/82.01, 82.08; 435/287.1, 287.2 [IMAGE AVAILABLE]

25. 5,605,839, Feb. 25, 1997, Methods and apparatus for use in sequential chemical reactions; Richard J. Simpson, et al., 436/89; 422/50, 186.04; 436/161, 180 [IMAGE AVAILABLE]

26. 5,593,564, Jan. 14, 1997, Microcolumn-microcolumn flow interface and method; Catherine K. Templin, et al., 204/451; 73/61.53, 61.56; 204/453, 601, 604; 422/70 [IMAGE AVAILABLE]

27. 5,565,171, Oct. 15, 1996, Continuous biochemical reactor for analysis of sub-picomole quantities of complex organic molecules; Norman J. Dovichi, et al., 422/68.1, 69, 70, 81, 101, 103, 107, 116; 436/89, 94, 177, 178 [IMAGE AVAILABLE]

28. 5,561,069, Oct. 1, 1996, Surface plasmon resonance detector having collector for eluted ligate; Michael Brigham-Burke, et al., 436/518; 356/317, 318; 385/12, 129, 130; 422/55, 57, 63, 82.05,

82.11; 435/808; 436/164, 165, 524, 525, 527, 529, 532, 805 [IMAGE AVAILABLE]

29. 5,538,898, Jul. 23, 1996, Method suitable for identifying a code sequence of a biomolecule; Hemantha K. Wickramasinghe, et al., 436/94; 422/82.01, 82.05, 82.08, 82.12; 436/164, 177 [IMAGE AVAILABLE]

30. 5,529,899, Jun. 25, 1996, Immunoassay for AH receptor transformed by dioxin-like compounds; Geoffrey D. Wheelock, et al., 435/6; 422/68.1, 69; 435/7.21, 7.92, 7.93, 7.94, 970, 975; 436/501, 503, 807, 809 [IMAGE AVAILABLE]

31. 5,527,711, Jun. 18, 1996, Method and reagents for binding chemical analytes to a substrate surface, and related analytical devices and diagnostic techniques; May Tom-Moy, et al., 436/518; 204/403; 422/82.01, 82.11; 435/7.5, 962; 436/151, 528, 543, 807, 822; 548/304.1 [IMAGE AVAILABLE]

32. 5,510,084, Apr. 23, 1996, Process for immobilizing a nucleic acid fragment by passive attachment to a solid substrate, the solid substrate thus obtained, and its use; Philippe Cros, et al., 422/104; 435/6; 436/94 [IMAGE AVAILABLE]

33. 5,503,721, Apr. 2, 1996, Method for photoactivation; David P. Hearst, et al., 204/157.6, 157.15, 158.2, 902; 422/186.3 [IMAGE AVAILABLE]

34. 5,453,247, Sep. 26, 1995, Instrument and method for the sequencing of genome; Ronald C. Beavis, et al., 422/68.1; 435/287.2, 287.3; 436/173 [IMAGE AVAILABLE]

35. 5,415,841, May 16, 1995, Continuous biochemical reactor for analysis of sub-picomole quantities of complex organic molecules; Norman J. Dovichi, et al., 422/68.1, 69, 70, 81, 101, 103, 107, 116; 436/89, 94, 177, 178 [IMAGE AVAILABLE]

36. 5,395,587, Mar. 7, 1995, Surface plasmon resonance detector having collector for eluted ligate; Michael Brigham-Burke, et al., 422/68.1, 63, 82.11, 100 [IMAGE AVAILABLE]

37. 5,369,037, Nov. 29, 1994, Simultaneous multiple assays; W. Peter Hansen, 436/533; 356/336, 338; 422/73, 82.05, 82.09; 435/808; 436/523, 534, 805 [IMAGE AVAILABLE]

38. 5,358,690, Oct. 25, 1994, Environmental sample collection and membrane testing device; Raouf A. Guirguis, 422/58, 56, 913; 435/287.2, 288.1, 309.1, 975; 436/63, 165 [IMAGE AVAILABLE]

39. 5,286,452, Feb. 15, 1994, Simultaneous multiple assays; W. Peter Hansen, 422/73; 356/336, 338; 422/82.05, 82.09; 435/808; 436/523, 533, 534, 805 [IMAGE AVAILABLE]

40. 5,252,459, Oct. 12, 1993, Indicator reagents, diagnostic assays and test kits employing organic polymer latex particles; Peter J. Tarcha, et al., 435/6; 422/61; 435/7.7, 7.71, 7.9, 975; 436/533, 534, 548, 808 [IMAGE AVAILABLE]

41. 5,247,067, Sep. 21, 1993, Peptide and its use; Terukatsu Arima, et al., 530/324; 422/61; 530/806 [IMAGE AVAILABLE]

42. 5,221,518, Jun. 22, 1993, DNA sequencing apparatus; Randell L. Mills, 422/62, 67, 82.05; 435/284.1, 287.2; 436/89 [IMAGE AVAILABLE]

43. 5,184,020, Feb. 2, 1993, Device and method for photoactivation; David P. Hearst, et al., 250/455.11, 454.11, 504R; 422/186 [IMAGE AVAILABLE]

44. 5,174,962, Dec. 29, 1992, Apparatus for determining DNA sequences by mass spectrometry; Thomas M. Brennan, 422/78; 250/281; 422/71, 80, 116; 436/59, 155, 161 [IMAGE AVAILABLE]

45. 5,171,989, Dec. 15, 1992, Method and apparatus for continuous sample ice matrix production for laser desorption in mass spectrometry;

Evan R. Williams, et al., 250/288; 73/863.11, 864.81; 422/81 [IMAGE AVAILABLE]

46. 5,126,442, Jun. 30, 1992, Advanced glycosylation endproducts and associated methods; James G. Farmar, et al., 536/29.2; 252/645, 646, 700; 422/61; 424/59; 435/6, 7.1, 7.9, 7.91, 14, 18, 971, 972, 975; 436/86, 504, 543, 545, 546; 530/356, 362 [IMAGE AVAILABLE]

47. 5,064,767, Nov. 12, 1991, Carboxyl-terminal protein sequencing method and kit; Dean A. Le, et al., 436/89; 422/61; 436/98, 111, 120, 128; 530/345, 402, 408, 409, 410 [IMAGE AVAILABLE]

48. 5,041,388, Aug. 20, 1991, C-terminal peptide sequencing, activated support and reagent system therefor, and method of producing the activated support; Victoria L. Boyd, et al., 436/89; 422/61; 436/178; 525/326.2, 327.7, 328.3, 333.5, 333.6, 393; 530/345, 408 [IMAGE AVAILABLE]

49. 5,017,696, May 21, 1991, Advanced glycosylation end products and associated methods; James G. Farmar, et al., 536/18.7; 422/61; 424/59; 436/86, 504, 543, 545, 546; 514/836, 885; 530/356, 362 [IMAGE AVAILABLE]

50. 4,921,788, May 1, 1990, Competitive nucleic acid immunoassay for the detection of analytes; Dale G. Deutsch, 435/6; 422/61; 435/810, 975; 436/531, 810 [IMAGE AVAILABLE]

51. 4,794,088, Dec. 27, 1988, Method and apparatus for separating and analyzing using liquid chromatography; Yoshiyuki Miyaki, et al., 436/161; 73/61.52; 210/198.2, 321.6, 321.72, 321.74, 500.21, 500.23, 656; 422/70; 436/178 [IMAGE AVAILABLE]

52. 4,313,911, Feb. 2, 1982, Low pressure tritiation of molecules; Thomas F. Moran, et al., 422/159; 250/303, 427; 252/645; 422/906; 930/10; 976/DIG.398 [IMAGE AVAILABLE]